

## WHAT IS CLAIMED IS:

- 1           1.       A controlled debris perforating system, comprising:  
2                   a pre-fragmented shaped charge having a charge case and an explosive  
3           material.
- 1           2.       The controlled debris perforating system of claim 1, wherein the charge  
2           case defines at least one slot.
- 1           3.       The controlled debris perforating system of claim 2, wherein the at least  
2           one slot is axially oriented.
- 1           4.       The controlled debris perforating system of claim 2, wherein the at least  
2           one slot is circumferentially oriented.
- 1           5.       The controlled debris perforating system of claim 2, wherein the at least  
2           one slot is a U-notched groove.
- 1           6.       The controlled debris perforating system of claim 2, wherein the at least  
2           one slot is a V-notched groove.
- 1           7.       The controlled debris perforating system of claim 2, wherein the at least  
2           one slot is an external slot.
- 1           8.       The controlled debris perforating system of claim 2, wherein the at least  
2           one slot is an internal slot.
- 1           9.       A method of controlling the debris during perforating, comprising:  
2                   providing a pre-fragmented shaped charge having a charge case defining a  
3           plurality of grooves.
- 1           10.      The method of claim 9, wherein the plurality of grooves are axially  
2           oriented.

1           11.    The method of claim 9, wherein the plurality of grooves are  
2 circumferentially oriented.

1           12.    A shaped charge made by a process, comprising:  
2                   inserting an explosive into a case;  
3                   inserting a liner over the main body of explosive; and  
4                   machining a plurality of slots in the case.

1           13.    The shaped charge made by the process of claim 12, wherein the plurality  
2 of slots are U-notched grooves.

1           14.    The shaped charge made by the process of claim 12, wherein the plurality  
2 of slots are V-notched grooves.

1           15.    The shaped charge made by the process of claim 12, wherein the plurality  
2 of slots are machined externally.

1           16.    The shaped charge made by the process of claim 12, wherein the plurality  
2 of slots are machined internally.

1           17.    A method of using one or more pre-fragmented shaped charges in a well,  
2 comprising:  
3                   providing a perforating string having one or more pre-fragmented shaped  
4                   charges; and  
5                   conveying the perforating string into the well.

1           18.    The method of claim 17, wherein the perforating string comprises a  
2 loading tube and carrier.

1           19.    The method of claim 17, wherein the perforating string comprises a spiral  
2 gun.

1           20.    The method of claim 17, wherein the perforating string comprises a strip  
2 gun.